

genu3

Specialised Knee Isokinetic System

Isokinetics is an essential methodology in modern rehabilitation practice. The knowledge of the advantages and the limits associated with this method, combined with the experience acquired in many years of research, has led to the development of the **genu3**.

This is a compact, user-friendly, cost-effective unit, designed to work beneficially on knee flexion and extension functions.

The **genu3** utilises a hydraulic brake to improve the movement fluidity while ensuring the patient's complete safety. The dynamometric brake is integrated in the seat support structure for maximum compactness.

The **genu3** is a complete system for rehabilitation, training and assessment. All measured values can be displayed in real time and saved for post-processing. The software, developed for Windows™, is user-friendly and provides an amusing video game designed to enhance the patient's motivation.

The programmable software ensures maximum safety for the patient (the range of motion can be limited at any point of the movement either by mechanical stops or via software setting).

The special **genuV** bench (optional) allows performing Closed Kinetic Chain exercises.



MAIN FEATURES

Types of movement

- Isokinetic
- Inertial isotonic
- Hydrodynamic

Main measured parameters

- Speed
- Torque (peak, average)
- Range of Motion
- Work
- Power
- Resistance Index
- Flexion/Extension ratio

Treatable joints

- Knee (flexion/extension)
- Lower limb closed kinetic chain (optional)

Configuration

Isokinetic Unit: single seat with integrated hydraulic dynamometer.

Control console/ processing unit: Pentium processor or compatible, Windows, monitor, keyboard, mouse and colour printer, RS232 serial connection to the isokinetic unit, trolley. (code 80005501)

Motion control

Range of speeds: 40°/s. 400°/s.

Independent setting of flexion and extension speeds

Torque: measured on the whole articular angle, 1Nm resolution
Max. measurable torque: 400 Nm

Range of Motion: 240°, resolution 0,75°

Work: real-time measurement, maximum work/repetition, total work, resistance index, fatigue index.

Operating configurations and options

genu3 entry level configuration (code 80000500)

genuV option for Closed Kinetic Chain exercises (code 80000505)

Sizes and weights

Isokinetic unit: 110 x 110 x 125h cm

Control console: 70 x 70 x 115h cm

Minimum working space: 200 x 270 cm

Isokinetic unit: 155 Kg

Control console: 30 Kg

Electrical characteristics

Power consumption: max 500VA (operation/stand-by)

Class and type according to CEI EN 60601 standard: Class I-Type B

Protection fuses accessible from outside

Installation requirements

Power requirements: Single-phase, 220 V - 50 Hz

Environmental conditions: temperature between 10°C and 40° C.

Relative humidity: 0% - 75% (without condensation)